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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,318	05/16/2006	Tatsuro Iwasaki	2950-061389	1885
28289	7590	12/09/2009	EXAMINER	
THE WEBB LAW FIRM, P.C. 700 KOPPERS BUILDING 436 SEVENTH AVENUE PITTSBURGH, PA 15219			SINGH, SUNIL	
			ART UNIT	PAPER NUMBER
			3672	
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			12/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Office Action Summary</b></p>	<b>Application No.</b> 10/579,318	<b>Applicant(s)</b> IWASAKI ET AL.	
	<b>Examiner</b> Sunil Singh	<b>Art Unit</b> 3672	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 November 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP document (EP 272233) in view of Skogberg et al. or Skogberg et al. (US 4509889, 4634317).

EP document teaches steel pipe rockbolt, comprising a rockbolt main body (30,31) and a pressurized-fluid-introducing sleeve (13,32) fixed by threaded connection (33,34) to the rockbolt main body at an end for introduction of a pressurized fluid, wherein the rockbolt main body is configured to hydraulically expand upon the introduction of the pressurized fluid (see disclosure), the pressurized-fluid-introducing sleeve comprising a projecting part (13) with an outer diameter larger than a diameter of an aperture of a bearing plate (22) and a pressurized fluid introducing hole (see Fig. 4), and a bearing-plate-holding part (32) with an outer diameter smaller than the diameter of the aperture of the bearing plate, whereby the bearing plate is held in contact with a step between the projecting part and the bearing-plate-holding part, the projecting part and the bearing-plate- holding part having a single, one-piece, unitary construction, the projecting part being fixed relative to the bearing plate holding part, whereby the bearing plate locates on an edge of a rockbolt-setting hole drilled in a bedrock or ground, and

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the bearing-plate-holding part extends through the aperture of the bearing plate into the rockbolt-setting hole. EP document discloses the invention substantially as claimed.

However, EP document is silent about the sleeve being fixed by welding to the rockbolt main body. Skogberg et al. '899, '317 both disclose a sleeve fixed by welding (see col. 3 lines 3-4, col. 3 lines 5-6) to a rockbolt main body. It would have been considered obvious to one of ordinary skill in the art to modify EP document by further fixing the sleeve to the rockbolt via welding as taught by either Skogberg et al. '899 or '317 since such a modification would prevent the unwanted decoupling of the main body sections. With regards to claim 2, it would have been considered obvious to modify EP document to have a circumferential groove on the projecting part since such a modification allows for gripping of the sleeve during assembly.

Re claim 3, it would have been considered obvious to have the rockbolt main body formed from a steel pipe coated with a Zn, Zn-Al or Zn- Al-Mg plating layer since such a modification provides adequate strength and prevent corrosion.

Re claims 4, 6, the rockbolt main body has a continuous outer surface defining a hollow cavity that is adapted to hydraulically expand upon the introduction of the pressurized fluid (see disclosure of EP document).

With regards to claim 5, it would have been considered obvious to modify EP document to include an expansive groove extending along an axial direction of the deformed pipe as taught by either Skogberg et al. '899 or '317 (see disclosure) since such a modification facilitates installation.

***Response to Arguments***

3. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/  
Primary Examiner, Art Unit 3672

Sunil Singh  
Primary Examiner  
Art Unit 3672

SS 12/4/09

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